WHAT IS CLAIMED IS:

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- 1. Apparatus for the measurement of fruit particles comprising:
- a substantially opaque cabinet;
- a camera in the upper portion of said cabinet;
- a light source in said cabinet;
- a sample tray; and
- a computer with image analyzing software.
- 2. The apparatus of claim 1 wherein said light source comprises a light box in the lower portion of said cabinet.
- 3. The apparatus of claim 1 wherein said light source comprises an incident light source within said cabinet.
- 4. The apparatus of claim 1 wherein the light source comprises switches for adjusting the intensity of the light.
- 5. The apparatus of claim 1 wherein the light source comprises multiple, independently-adjustable, light-producing sources.

- 6. The apparatus of claim 1 wherein the inside of the cabinet is non-reflecting.
- 7. The apparatus of claim 1 wherein said sample tray comprises a light-transmitting bottom.
- 8. The apparatus of claim 2 wherein said apparatus further comprises a light box cover.
- 9. The apparatus of claim 8 wherein said apparatus further comprises a sample tray guide.

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10. Apparatus for the measurement of fruit particles comprising:

a substantially opaque cabinet with a non-reflecting inside surface;

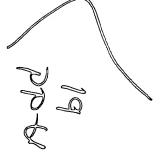
a camera in the upper portion of said cabinet;

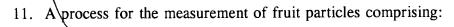
a light box with light intensity adjusting switches;

an incident light source;

a sample tray with a light-transmitting bottom; and

a computer with image analyzing software.





placing fruit particles in a sample tray;

illuminating said fruit particles so that an image may be obtained in which the fruit particles are distinguishable from the background;

capturing a computer-readable image of at least a portion of said illuminated fruit particles;

using a computer and an image analyzing software program to analyze said image and obtain information concerning said fruit particles.

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